

## Omniplex

The Omniplex offers four museums under one roof, as well as many galleries and traveling displays. It is home to the Kirkpatrick Science and Air Space Museum, with over 300 educational and interactive exhibits, the International Photography Hall of Fame, the Red Earth Indian Center, a state-of-the-art planetarium, greenhouses, and galleries. The newest addition is Oklahoma's first large-format theater, the new Omni Dome. It is the state's first 70 millimeter IWERKS film theater that keeps visitors of all interests and ages entertained and enlightened.



## 45th Infantry Division Museum

Nearby, visitors will find the 45th Infantry Division Museum, Oklahoma's only state-operated museum dedicated to military history. The museum exhibits equipment relevant to the history of Oklahoma's military heritage from the Spanish exploration to the present day. Numerous items housed in the museum were captured near the end of the war by members of the 45th Division and include items from Hitler's Munich apartment, his alpine home, and the Berlin bunker. The outdoor display includes a large collection of military vehicles, weapons, and aircraft on 12 acres surrounding the museum building.



## Remington Park

Located in the northeastern corner of Oklahoma City is Remington Park, a \$97 million pari-mutuel horse racing facility, with thoroughbred and quarter horse racing. The spectacular stadium is fully enclosed, climate-controlled, and features a panoramic view of both the track and Paddock Gardens. Off-track betting is a new feature offered in Oklahoma, with several designated sites throughout Oklahoma City where you can wager on races across the country.

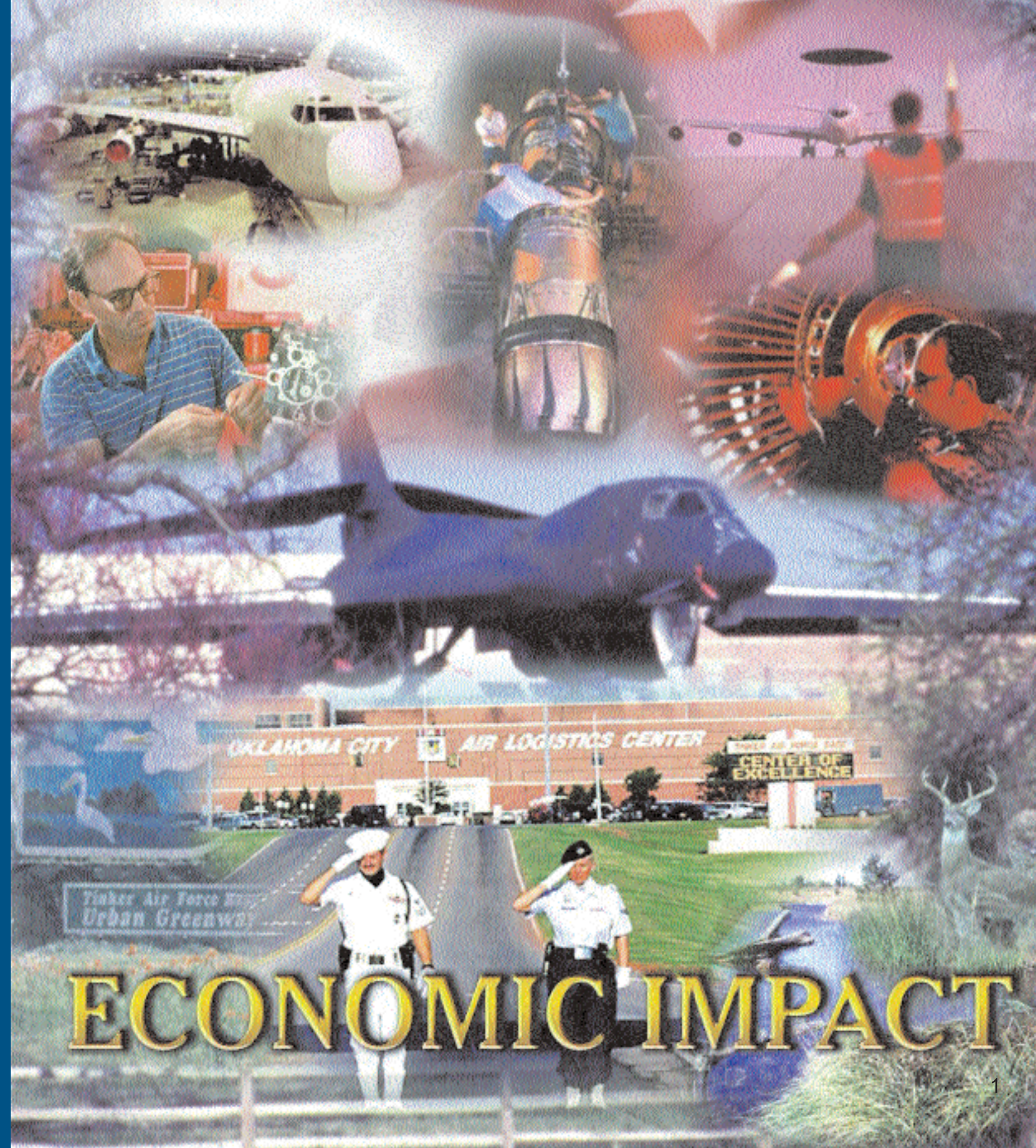


## Frontier City Amusement Park

Frontier City Theme Park offers adventure for all ages. There are over 50 rides, shows, and attractions including four thrilling roller coasters, a river raft ride, a live Hollywood-style gunfight, down-home eateries, and western frontier retail shops. Throughout the season, several legendary music artists provide live performances in the outdoor concert amphitheater.



# TINKER TODAY



# ECONOMIC IMPACT



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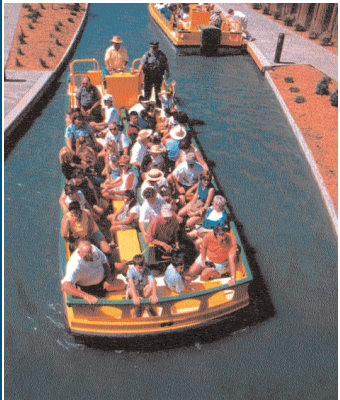
"Excellence In All We Do"

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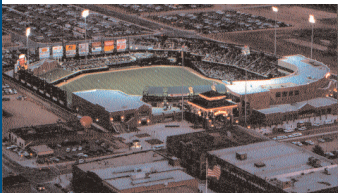


Tinker AFB "IDEA PROGRAM"		
The spirit of Tinker is in the excellence exhibited by our people. Their ideas have contributed to \$4,747,862 in tangible savings for a 12-month time period (FY01) benefiting not only Tinker, but also the tax dollars of Oklahoma, and the people in the United States of America. Awards of \$163,765 were paid to submitters with approved ideas.		
Roy Dickey, Aircraft Management Directorate		
Tangible savings:		\$1,152,199
James Loman, Propulsion Management Directorate		
Tangible savings:		\$666,408
Robert Perry, Terry Sanders, Terry Rollings, Milford Chisholm, and William Rogers, Airborne Accessories Directorate		
Tangible Savings:		\$389,796
Tim Sanders and Wayne Chisholm, Airborne Accessories Directorate		
Tangible Savings:		\$289,165
Robert Frame and Joseph Larocca, Airborne Accessories Directorate		
Tangible Savings:		\$202,685



Bricktown Canal

Bricktown is Oklahoma City's newest entertainment and dining district. With several restaurants and a total capacity of over 4,000 seats, shopping, and a generous helping of the turn-of-the-century charm, Bricktown has become a hotspot for Oklahoma City nights and lunches. It is an integral part of the Metropolitan Area Projects (MAPs) which started in 1993. Several of the buildings were constructed before 1900, and are in use today. The buildings as well as parts of the streets are made of the familiar, deep red brick.



Bricktown Ballpark

First to open in the rejuvenated entertainment district was the Southwestern Bell Bricktown Ballpark, a majestic downtown ballpark that houses the top-ranked Oklahoma RedHawks. There's not a bad seat in the house in this brick-and-steel stadium that seats 12,000. This ambitious project blends contemporary function with historic aesthetics, and enshrines many of the state's baseball legends, centered around a larger-than-life statue of Oklahoma's own Mickey Mantle.



Cowboy Hall of Fame

High on the list of attractions is the legendary Cowboy Hall of Fame and Western Heritage Center. Located high atop Persimmon Hill in the rolling hills of northeast Oklahoma City, the museum and beautiful gardens provide an opportunity to step into the past and learn about the history and culture of the American West. The 230,000 square foot museum presents the rugged individualism and romantic spirit of the frontier. The museum houses a priceless collection of art, artifacts, western paintings, and the most famous piece of western art, "The End of the Trail" by James Earle Fraser.



White Water Bay

Visitors can "cool off" by diving into White Water Bay, Oklahoma City's Wet and Wild water get-a-way. It offers everything needed for family fun, with over 25 acres of slippery slides, chutes, flumes, high speed dives, and a winding lazy river in a relaxing tropical setting.



# COMMUNITY PARTNERSHIPS

Tinker has always enjoyed the support of its friends in the State of Oklahoma and the surrounding communities. Through good times and bad, we support one another and Tinker is extremely grateful for this strong bond with Oklahoma neighbors.



Tinker dependents receive commissary scholarship.



Tinker Elementary 5th and 6th graders participate in Tinker's first Youth Fishing Clinic.



Environmental Management biologist and Community Advisory Board members demonstrate the "Talking Skulls" activity to Oakridge Elementary School students.



Audience receives information on the F100 Engine workload transferred from San Antonio, Texas.



Husband and wife team handing out stickers at the Oklahoma State Fair.

# WELCOME TO TINKER

The United States Air Force is the world's most powerful and respected Air Force. Our military, civilian, and contract personnel at Tinker Air Force Base are proud to provide the essential logistics support for our Air Force's lean and lethal combat force. They are proud to support every Air Force mission-combat, contingency response, counter-drug operation, humanitarian assistance, and weather reconnaissance — knowing the Air Force performs more global missions today than ever with the smallest active, Guard, and Reserve force in our history.

Tinker is a national asset and our future is bright. Our people are motivated, trained, disciplined, and ready to serve. We've had significant increases in workload with the closing of the air logistics centers at McClellan Air Force Base, California, and Kelly Air Force Base, Texas. It has been our good fortune that hundreds of employees at these bases moved to Oklahoma when the workload came to Tinker.

Although our future is bright, there are three major areas of concern facing us today. We have an infrastructure problem at Tinker in that we have no room to grow and many of our facilities are antiquated. For example, our primary aircraft maintenance building was

designed and built for World War II aircraft, not for the maintenance workload we have now.

Another area of concern is our work force. Nearly half of all civilian workers at Tinker are eligible for retirement in five years and recruiting and retention of Air Force military personnel have been a challenge in today's competitive environment. We're also facing challenges with the systems and technology our skilled professionals depend on to serve the warfighters such as rapid changes in information technology and high costs in developing and maintaining our technical edge over potential enemies.

Citizens of this great state recognize that Tinker Air Force Base is an invaluable key to the area's current and future economic success. It is the largest single-site employer in the state with a total payroll of \$986M and an overall \$2.27B impact on the state. Because they appreciate Tinker's economic impact and our pivotal role in the defense of our nation, Oklahomans are enthusiastic as we work together to explore new ways to partner with industry, local government, and educational leaders to solve our challenges.

I'm proud to be associated with our community neighbors who understand the importance



of Tinker, and I'm equally proud of the hard working men and women of Tinker Air Force Base who give all they've got to our critical mission ... "Global Vigilance, Reach, and Power." Together, the future is in our hands and we're shaping and molding that future now so that Tinker remains a world-class facility.

CHARLES L. JOHNSON II  
Major General, USAF  
Commander



# Tinker's Economic Impact

## Oklahoma Payroll Dollars and Personnel by County

<b>Oklahoma</b>			
\$629,740,969			
15,419			
<b>Canadian</b>			
\$20,956,627			
476			
<b>McClain</b>			
\$10,352,673			
219			
		<b>Pottawatomie</b>	
		\$64,685,145	
		1,507	
		<b>Logan</b>	
		\$5,493,728	
		121	
		<b>Cleveland</b>	
		\$206,728,649	
		4,513	



Statistics based on FY01 Data. Payroll dollars do not reflect AF Reserve, Air National Guard, and AF Reserve Technicians (ARTS).  
The MSA, as defined by the U.S. Bureau of Labor Statistics, includes Oklahoma, Canadian, Cleveland, Logan, McClain, and Pottawatomie Counties.

## \$2.27B Economic Impact

24,577 Military and Civilian Personnel

8,352 Military 16,225 Civilian

\$986,250,236 Annual Payroll

29,542 Indirect Jobs Created

\$835,063,714 Value of Jobs Indirectly Created

## Oklahoma's Largest Single-Site Employer

## ASSOCIATE DOD AGENCIES



Defense Information Systems Agency's Defense Enterprise Computing Center Oklahoma City provides our nation's warfighters a full range of state-of-the-art affordable information technology (IT) services including computer processing, software development and monitoring, and communications design and support. The computer center, one of five DECCs within DISA, is located in Oklahoma City and has subordinate detachments at Montgomer AL; San Antonio TX; and Warner Robins GA. DECC Oklahoma City supports a worldwide clientele including Air Force, Navy, Army, Marine, Air Force Reserve, Air National Guard, and other federal agencies. Within DECC Oklahoma City, IT processing is provided to more than 1.1M users in all 50 states and 88 countries. The organization carries a payroll of over \$55.9M, has capital assets of \$402.2M, and employs approximately 694 personnel.



Document Automation & Production Service provides full automated printing services world-wide in support of America's armed forces, encompassing electronic conversion, retrieval, output, and distribution of digital and hard copy information.

Defense Reutilization & Marketing Office (DRMO) is a service organization of the Defense Logistics Agency. The DRMO provides property disposal services to Tinker, other military commands, and



other federal agencies within this geographic area. DRMO reutilizes, transfers, and donates millions of dollars in government property to DOD organizations, federal agencies, state agencies, and eligible donee customers annually. DRMO also conducts surplus sales to the general public and authorized buyers.



Defense Distribution Depot Oklahoma City (DDOO) provides a full range of distribution and transportation services for the Oklahoma City Air Logistics Center, all associate activities, and DOD installations around the globe. Responsible for a \$10.2B inventory with 247,941 line items stored at Tinker AFB, DDOO employs 681 personnel and processes 158,735 shipments and receipts monthly.



# ASSOCIATE MISSIONS

The 38th Engineering Installation Group (38EIG) at Tinker is part of Air Force Materiel Command (AFMC), Wright-Patterson AFB OH, and reports to the Electronics Systems Center, an AFMC organization at Hanscom AFB MA. The 38EIG delivers command, control, communications and computer (C4) infostructure through requirements planning, engineering, and management of organic and contract implementation. In addition, it provides unique, one-of-a-kind services such as centralized contract execution Air Forcewide, worldwide crises and contingency response, and specialized electromagnetic test and measurement engineering.

The 38EIG members provide customers a variety of services including engineering, installation, contracting, and program management. Although the focus is on Air Force communications infrastructure needs, the 38EIG supports a variety of government agencies in 40 countries and nearly every state in the US. The group provides long-range C4 planning services through the System Telecommunications Engineering Managers to customers worldwide and supports telecommunications needs through management of communications services and operations and maintenance contracts. The rapid response force provides integrated C4 installation, repair, and removal anytime, anywhere, and under any conditions. The 38EIG provides workload and engineering assistance to 19 Air National Guard engineering installation squadrons in 16 states who directly support the group's worldwide mission. The 38EIG brings a rich tradition of excellence and a 50-year history of success to the communications and information community.



The 3rd Combat Communications Group's (3CCG) 750 highly trained personnel and \$280M equipment provide deployable communications, computer systems, navigational aids, and air traffic control services anywhere in the world for Air Force, Department of Defence, and other US commitments. Known as the "3rd Herd," the group deploys more than 150 mission systems providing initial services to Air Force wing level customers and other units in locations where these capabilities don't exist, even under hostile conditions.

Because of its special ability to respond quickly, the 3CCG provides emergency services to many federal agencies including the Drug Enforcement Agency and US Coast Guard.

There has been a mobile communications unit at Tinker since November 1952 with the activation of the 3rd Airways and Air Communications Service Squadron, Mobile. Throughout 50 years of service, members of the group have provided mobile and tactical communications services during virtually every major DOD and Air Force operation including the Cuban Missile Crisis, Vietnam, OPERATIONS DESERT SHIELD/STORM and Joint Forge in Kosovo.

More recently, members of 3rd Herd are still deployed worldwide in support of various operations. Members of the Herd deployed and continue to support OPERATION ENDURING FREEDOM, our response to the terrorist attacks on the World Trade Center and the Pentagon. Their services help ensure mission success for US operations in Afghanistan.



# Tinker's Economic Impact

## Big Business for Oklahoma

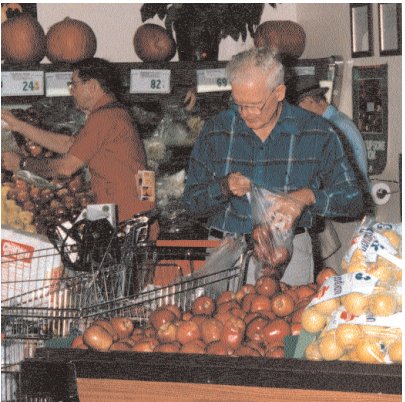
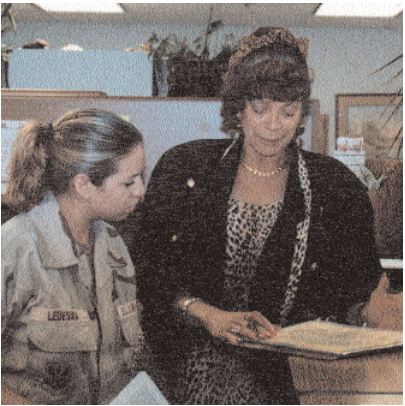
	STATE \$2.27B	MSA* \$2.12B
	\$ Millions	
Payroll	986.3	938.0
Construction	34.0	26.7
Contracts & Procurements (1)	285.7	280.3
Commissary	0.4	0.4
Base Exchange	0.5	0.5
Education (Impact Aid/Tuition Assistance)	1.8	1.8
Health (TRICARE)	11.8	11.8
Temporary Duty	3.7	3.7
Other	109.5	100.9
Tinker's Economic Impact	2,268.8	2,120.1
Primary Jobs (2)	24,577	22,255
Secondary Jobs	29,542	26,751
Value of Jobs	835	756

- (1) Service, material, equipment, and supplies  
(2) Includes Non-Appropriates Funds (NAF) contractor and private business personnel located on base

### Retiree Statistics

	STATE	MSA
Army	13,158	2,799
Air Force	14,244	7,822
Navy	4,457	1,529
Marines	1,133	396
Coast Guard	235	126
Military Survivor Annuitants	4,030	1,516
Civilian	28,649	15,709
Civilian Annuitants	<u>12,806</u>	<u>6,660</u>
Total Retires	78,712	36,557

\*Metropolitan Statistical Areas





# FUNDS MANAGED

## Appropriated Funds

	\$ Millions
Other Major Commands	1,923.4
Operations and Maintenance	1,254.2
Investment (3-Yr. Appropriations)	1,276.5
Research, Development, Test & Evaluation (2-Yr. Appropriations)	182.2
Foreign Military Sales	5.8
Other Appropriations	19.1

## SMAG MANAGED FUNDS

Supply Management Activity Group (SMAG)  
\$2.648B

\*\*\*\* Includes \$56M for civilian pay\*\*\*\*

## DMAG TOTAL REVENUE \$ Millions

	Total	Contract	Organic
Aircraft	593,466	288,783	304,683
Engines	642,746	257,648	385,098
Exchange	1,322,748	648,300	674,448
Software	204,464	150,723	53,741
Others	38,495	14,671	23,824

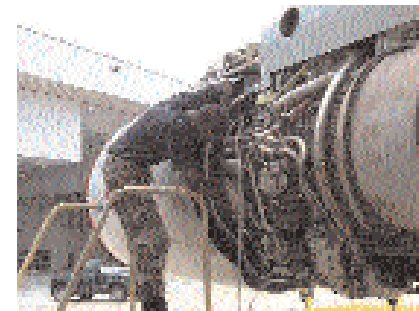
The Comptroller is the Chief Financial Officer for the air logistics center. The Comptroller Directorate is responsible for the overall financial management of appropriated and working capital funds accounts, and performs analysis and oversight of morale, welfare, and recreation activities. This includes budget preparation, execution reporting, accounting, cost analysis, and the broad spectrum of financial duties as described in the following description.

Advises the commander and product directors on the overall financial plan and Program Objective Memorandum (POM) development issues and processes. Provides cost analysis assistance and studies in support of OC-ALC acquisitions and Depot Maintenance financial processes. Serves as liaison for the center with the Defense Finance and Accounting Center on accounting issues and policies. Focal point for funding propriety, financial training, and funds allocations. Center lead for financial management functional group certification reviews.

The annual budget exceeds \$10B.

# ASSOCIATE MISSIONS

The 654th Combat Logistics Support Squadron provides "anytime, anywhere" logistics support. The highly trained men and women of the CLSS bring aircraft battle damage repair for the KC-135, B-1B, B-2, and B-52 aircraft, jet engine repair, and rapid area distribution support capabilities to any and all customers. The 203-member squadron is one of three combat logistics support squadrons in the Air Force that offers specialized logistic capabilities to directly support the Air Force's global power mission.





# ASSOCIATE MISSIONS

The 513th Air Control Group (513ACG) was activated at Tinker Air Force Base in 1996, becoming the first Air Combat Command associate organization. In the associate concept, active duty units own the aircraft with Air Force reservists sharing in the maintenance workload and operational flying missions. Reservists fly the same missions, operate an autonomous unit, and maintain the same professional standards as their active duty counterparts. Today, 513ACG aircrews regularly fly Airborne Warning and Control System (AWACS) missions aboard the E-3 "Sentry" aircraft throughout the world, providing Air Force and theater commanders with trained aircrews, maintenance personnel, and systems for airborne surveillance, warning, and control of U.S. and allied military aviation assets.

The total authorized manning for the 513ACG is 400 personnel. The majority of these are traditional reservists who serve on a part-time basis. About 100 are air reserve technicians who serve as a full-time cadre. The 513ACG's subordinate units include the 970th Airborne Air Control Squadron, the 513th Operations Support Flight, the 513th Aircraft Generation Squadron, and the 513th Maintenance Squadron.

The 513ACG has an annual total operating budget of approximately \$13M, which includes \$5.5M in civil service salaries for air reserve technicians, \$3.5M for traditional reservists salaries, and \$4M for contractual and other operating expenses.

The 507th Air Refueling Wing (507ARW) is one of three Air Force Reserve flying units stationed at Tinker AFB. The 507ARW flies and maintains the KC-135R "Stratotanker" aircraft. The 1,200-person wing provides aerial refueling, airlift, and expeditionary combat support around the globe in support of DOD taskings.

The 507ARW is the parent wing for a 400-member associate KC-135 group, the 931st Air Refueling Group, located at McConnell AFB, Kansas. The 507th reports to the Air Force Reserve's 4th Air Force and is gained by Air Mobility Command during mobilization. The 507ARW was activated at Tinker in 1972. The unit converted to its current KC-135R "Stratotanker" aerial refueling mission in 1994, after having flown and operated fighter aircraft for nearly 21 years. The 507ARW provides administrative support to the 513ACG and the 10th Flight Test Squadron. Today, the 507ARW consists of four subordinate groups, 15 squadrons, five flights, and 16 subordinate units.

The 10th Flight Test Squadron (10FTS) also makes its home on Tinker while reporting to the Air Force Reserve Command. Members of the 10FTS perform functional flight tests on Tinker aircraft after completion of programmed depot maintenance to ensure the aircraft is mission capable. They also conduct low-risk test flight missions on new aircraft components.



# CONTRACTING

Top Ten Oklahoma Contractors		Top Ten Largest U.S. Contractors	
	\$ Millions		\$ Millions
Raytheon Aerospace	115	General Electric Co. - Aircraft Engines	302
Boeing Aerospace	92	McDonald Douglas Corp.	232
UNC Lear Service	76	Pratt & Whitney	230
Chromalloy Gas Turbine Corp	16	Ogden Air Logistics Center	209
Oklahoma Gas & Electric	15	Boeing Defense and Space Group	187
OGE Energy Resources Inc.	13	DynCorp Aerospace Technology	184
Southwind Construction Co.	8	Lockheed Martin - Kelly Aircraft Center	167
Lori	7	Pratt & Whitney - San Antonio Inc.	142
Dyn Par LLC	5	Raytheon Aerospace	115
Shanks Excavating Co.	3	Pemco Aeroplex Inc.	102

OC-ALC	
Total Contracting Action	12,444
\$ Millions	
Contract Awards	3,509
Small & Disadvantaged	271
Awards within the State of Oklahoma	402
Awards within the Metropolitan Statistical Area	385

The Directorate of Contracting is responsible for the execution of more than \$3.5B annually in contract awards. The directorate's personnel are largely matrixed to the product directorates and annually process more than 12,500 contractual actions. The Aircraft Contracting Division supports the E-3, B-1B, B-2, B-52, C/KC-135 series aircraft, and missiles. It also supports 27 weapons systems managed by Contractor Logistics Support. The Operational Contracting Division provides support for the entire base including Navy

STRATCOMMWING ONE. The Airborne Accessories Contracting Division supports various hydraulic, instruments, autopilot, pneumatic, navigation, and breathable oxygen and accessory components. The Propulsion Contracting Division supports 14 jet engine modules.



# TINKER OVERVIEW



Tinker began its long history more than five decades ago, as the dream of several Oklahoma City businessmen, who put Oklahoma City's name in the hat as a military aircraft repair depot to support the war effort. Oklahoma City won the bid and construction began on a mere 1,500 acres, at an initial cost of \$14M. Tinker is named after Major General Clarence L. Tinker, a native Oklahoman and Osage Indian, who lost his life in WWII while leading a flight of LB-30 Liberators against Wake Island.

Clarence L. Tinker  
Major General

Today, Tinker's mega center aviation complex has a replacement value of over \$5B. This vast expanse of property contains over 5,033 acres of red Oklahoma land, and is located in the center of the United States, just minutes from downtown Oklahoma City and Will Rogers World Airport. Our central location offers easy access for shipping activities, major business functions, industrial maintenance, and is ideally situated for swift deployment to either US coast and beyond. Central Oklahoma's mild climate has an average yearly temperature of 60.5 degrees. Pilots boast of more than 300 clear days per year of optimum flying conditions. The 48 miles of roads encircling the base showcase the variance and beauty of Tinker's terrain. Adding to the boundless beauty and magnificence Tinker has to offer, its most important asset is the work force.

Each day, over 24,000 military and civilian personnel stream through the gates of Tinker Air Force Base and enter the highly-skilled technical and administrative world of aviation. Tinker teams work in 732 facilities offering approximately 15.6M square feet of space, utilizing state-of-the-art industrial equipment and processes valued at over \$860M. Parts and items to complete the job are housed in more than 138 acres of covered warehouse space. Tinker's two operational runways have access to more than 254 acres of ramp space while aircraft await programmed depot maintenance at the air logistics center.

## Statistical Data

Original Acquired Cost	\$889M
Today's Estimated Replacement	\$5.3B
Total Land Area	5,033 Acres
Runways	2
Aircraft Ramp	254
Roads	48
Number of Buildings	732
Floor Space	15.6M SF
Indoor Maintenance Area	6M SF
Covered Warehouse Space	4M SF

<u>Military Housing</u>	<u>Units</u>	<u>Capacity</u>
Family Units	730	787
Dormitory Quarters	9	39
Temporary Lodging Units	5	116
Visiting Officer Quarters	3	52
Visiting Airman Quarters	1	—

## Utilities

Electricity Purchased	388,848M W/yr
Natural Gas Purchased	2,253,047M BTU/yr
Water Purchased	25,000 gal/day
Water (AF owned Deep Wells)	2.7M gal/day

# 552nd AIR CONTROL WING

The 552nd Air Control Wing (552ACW) is responsible to the commander of Air Combat Command for the operations, maintenance, logistics, training, and combat support of E-3 Sentry Airborne Warning and Control System (AWACS) aircraft in support of combatant commanders. The wing provides combat-ready theater battle management forces at the direction of the Chairman of the Joint Chiefs of Staff. It operates and supports these forces worldwide ensuring combat capability for all peacetime and contingency operations.

On July 1, 1976, the 552nd Airborne Warning and Control Wing moved to Tinker with a new airframe. Its mission was to train crews and provide maintenance, communication, and logistics support for the Air Force's operational inventory of 32 E-3 Sentry aircraft. On October 1, 1991, Headquarters Air Force redesignated the wing as the 552ACW, and on June 1, 1992, the wing was

assigned to Air Combat Command.

In July 1993, the 552ACW became an operational unit of the 12th Air Force with headquarters at Davis-Monthan AFB AZ.

The 552ACW, with its rich combat heritage, is the main operating unit for the Air Force's E-3 "Sentry" aircraft. The Sentry provides all-weather surveillance, command and control, and communications needed by commanders of US and North American Treaty Organization air defense forces. As proven in OPERATION ALLIED FORCE, it is the premier air battle command and control aircraft in the world today. The radar has a range in excess of 250 miles (375.5 kilometers) for low-flying targets and farther for aerospace vehicles flying at medium to high altitudes. It can look down to detect, identify, and track enemy and friendly low-flying aircraft by eliminating ground clutter returns that confuse other radar systems.



E-3 Sentry crew members in preparation for landing



E-3 Sentry crew members



# STRATEGIC COMMUNICATIONS WING ONE

Headquartered aboard Tinker are seven Navy commands that combine to form Strategic Communications Wing ONE or TACAMO, "Take Charge and Move Out." Over 1,100 sailors carry out the day-to-day TACAMO routine, a Navy one-of-a-kind strategic mission. There are two operational TACAMO squadrons, Fleet Air Reconnaissance Squadrons Three and Four. Both fly the E-6 "Mercury," a modified Boeing 707 airliner. TACAMO's mission is one of strategic communications, and strategic command and control.

A "Mercury's" crew consists of about 14 aircrew and a battle staff. Sailors generally fly a 10-hour mission during which crews communicate with submerged ballistic missile submarines, Air Force bombers, and intercontinental ballistic missile silos. TACAMO crews are on alert 24 hours a day, every day of the year. A typical mission deployment lasts about two weeks and may take a sailor to any number of places in the world.

In addition to its squadrons, TACAMO also trains its enlisted and officer students at two separate training commands, Fleet Reconnaissance Squadron Seven and Naval Aviation Maintenance Training Detachment 1080. Both commands boast state-of-the-art computer-based training programs and scale aircraft training compart-

ments to simulate in-flight routines and emergencies. Two high-tech flight simulators round out one of the Navy's most advanced training programs. The "Mercury" crew communicates with its customers through use of a very low frequency antenna system. As the aircraft flies at a 25- to 40-degree bank in what is known as an "orbit," and just 10 mph above stall speed, up to five miles of cable is released from the rear of the Mercury to relay Presidential directives.

To support the squadrons and training pipeline, TACAMO also boasts a Navy Communications Station, Personnel Support Detachment Wing Command Staff. Originally stationed at both coasts, the squadron was consolidated aboard Tinker in 1992 providing one central location for training, administration, and mission. In addition to the commands at Tinker, TACAMO has detachments at Travis Air Force Base CA, Offutt Air Force Base NE, and Patuxent River Naval Base MD.

Born during the 1960's Cold War, TACAMO sailors continue to carry out their mission of strategic communication, command, and control. From America's Heartland, the sailors at Tinker proudly forge ahead to protect the nation's interests around the world.



**"TACAMO"  
TAKE CHARGE AND MOVE OUT**

# FACE OF TOMORROW



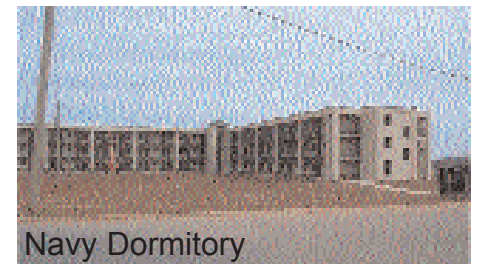
Since the early forties, Tinker and its close friends in the state, county, and local communities have grown and prospered together. We are the best of neighbors, supporting each other through good and bad to ensure Tinker's future growth. Today, our 5,033 acres are making room for new facilities that will continue to posture our work force for tomorrow's competitive workloads. Military con-

struction has flourished over the past 10 years and currently accommodates such programs as the B-2 software integration laboratory, Occupational Health Clinic, 34th Operational Squadron, and the 507th Air Refueling Wing KC-135 hangar. Future projects include dormitory construction and test facilities.



Air Driven Accessories

New facilities  
at  
Tinker AFB, Oklahoma



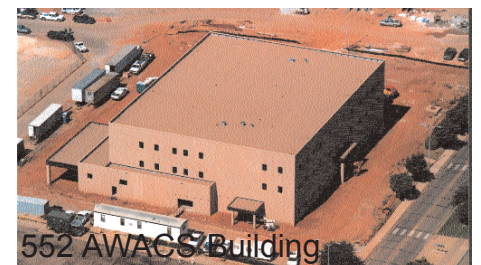
Navy Dormitory



Base Exchange/Commissary



34th Operational Squadron



552 AWACS Building



# OKLAHOMA CITY

Oklahoma City Air Logistics Center (OC-ALC) is Tinker's largest organization and eight-time recipient of the Air Force Materiel Command's "Organizational Excellence" Award. The center is the premier center for aviation logistics support, providing repair and management for some of the Air Force's major aircraft, missiles, engines, and components. Home of the B-52 bombers, over 1,460 of these vintage aircraft have been modified or repaired at OC-ALC since the late fifties. Current modifications to the fleet of -135 aircraft

ensure they are still going strong in the 21st century. The center has managed and maintained the E-3 Sentry (AWACS) since 1981. OC-ALC's Systems Support Managers for the B-2 provide day-to-day operational support to the 509th Bomb Wing at Whiteman AFB MO. The center is also program manager for B-1B, mobility readiness spares package and single integrated operational plan, organic maintenance activation, tooling, and special test equipment disposition.



**Aircraft**  
OC-ALC manages and maintains an aircraft inventory of 1,341 valued at over \$2B.



**Engines**  
OC-ALC manages an engine inventory of 21,287 valued at \$31.2B.

# BASE SUPPORT FUNCTIONS



Occupational Health



Heritage Park



Tinker is comparable to a city of 35,000 people and, like any city, it requires many amenities to smooth out daily operations. The 72nd Air Base Wing supports the entire installation providing critical daily operational functions such as security, fire protection, medical services, civil engineering, communications, supply, transportation, and air-

field operations. Special leisure amenities also supported by the wing include the officers' and enlisted clubs, an 18-hole golf course, picnic grounds, day care centers, a library, movie theater, swimming pools, fitness facilities, and a bowling center.



Tinker Fire Department



Joint AF and Navy Security



# ENVIRONMENT

Tinker continues to lead the way in alternative fuel usage by having the largest fleet of alternative fueled vehicles in the Department of Defense with 230 natural gas-powered vehicles.

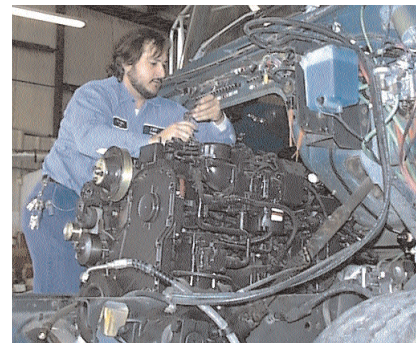
Tinker eliminated 150,000 pounds of hazardous air pollutants in FY01 by implementing the use of environmentally friendly paint strippers in aircraft and radome depainting operations. The center also reduced hazardous material usage by 80 percent with more environmentally friendly material substitutes and process improvements.

An enhanced aircraft component subsystem recycles process water 8-20 times prior to industrial wastewater treatment plant discharge, saving an estimated 8.5M gallons of water relative to the chemical depaint alternative.

A proactive remediation schedule for Tinker's contaminated sites has been implemented. Of 40 sites, 32 have the final remedial action in place. The base will close or have final remediation in place at five remaining high risk sites (one year ahead of the AF goal); three medium risk sites (three years ahead of the AF goal); and all low risk sites have been closed or have final remediation in place (13 years ahead of the AF goal).

A joint effort by eight different base organizations resulted in a contract to install several miles of new trails, a fishing dock ramp, and a greenway trailhead information sign. Tinker enjoys a reputation of outstanding community involvement through annual Earth Day celebrations, Arbor Day observances, Cub Scout tree plantings, and cooperative landscape beautification projects with local schools. An avid participant of the Central OK Clean Cities Coalition, Tinker shares the belief that the promotion and use of alternative fueled vehicles is the way of the future. Acting on that belief will not only significantly enhance our air quality, but will lessen our nation's dependence on fossil fuels.

Tinker's alternative fuels program leads the Air Force with 230 compressed natural gas vehicles.



Workers install a compressed natural gas engine on one of Tinker's large trucks.

Substitution of environmentally friendly paint strippers in aircraft radome depainting operations has eliminated 80,000 pounds of hazardous air pollutants at Tinker.



New trails, a fishing dock, foot bridges, and nature information signs enhance the recreational experience for Tinker residents.

# AIR LOGISTICS CENTER

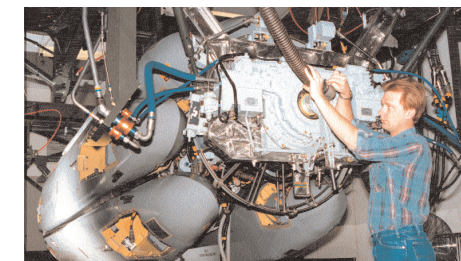
OC-ALC's physical plant is located on over 5,000 acres, includes two operational runways, 254 acres of ramp space, 138 acres of indoor maintenance area, and nearly 93 acres of covered warehouse space. Daily operations are conducted in over 700 buildings, including the primary industrial maintenance facility, Building 3001. This building is 7/10 of a mile long, has 62 acres of industrial and administrative space under one roof, and houses KC-135 overhaul docks, jet engine repair, and countless back-shop facilities. Over 6,000 professionals work 51 major categories in more than 200 select fields from man-

agement to technical skills in performance of worldwide logistics management.

Each organization within the center functions as a self-contained industrial business entity to provide in-house maintenance and repair along with worldwide systems and item management responsibilities. These organizations, called directorates, are structured along product lines of aircraft, engines, commodities, cruise missiles, and software. These product lines encompass seven different business areas of product and installation support and information management, science and technology, and test and evaluation.



**Components**  
OC-ALC manages an inventory of over 18,000 items valued at \$3B.



**Missiles**  
The ALC manages an inventory of 3,300 Air Force Cruise Missiles valued at \$3B.



**Software**  
OC-ALC serves the Air Force mission by performing software services in the area of acquisition support, development, and sustainment.



# AIRCRAFT

Over 70 aircraft receive Programmed Depot Maintenance Annually  
at Oklahoma City Air Logistics Center

OC-ALC Aircraft Directorate manages an inventory of over 1,341 aircraft valued at almost \$2B. The 3,200-person directorate oversees a \$200M annual budget that conducts system support management for the B-1B Lancer, B-2A Spirit, and the E-3 Sentry, as well as system program director for the B-52 Stratofortress and C/KC-135 fleet of aircraft. The ALC is the center of excellence for Contractor Logistics Support (CLS) aircraft with an operational budget of over \$550M. In addition, the center provides product group management support for the Air Force cruise missile programs. The 1,800-missile inventory is valued at \$2.5B. Over 70 aircraft including the B-1B, B-52, E-3 (AWACS), and C/KC/EC-135 receive ALC programmed depot maintenance (PDM) yearly. The center also has a highly successful teaming arrangement with the Navy to provide enhanced phase maintenance on the Navy E-6. ALC/Navy teaming called the "Enhanced Phase Maintenance Program" provides maintenance and engineering support to the Navy's E-6, allowing the Navy to keep aircraft in the air longer, as well as save millions of tax payer dollars.

The E-3 is in the midst of a number of modifications and upgrades that vastly improve the capabilities and life of the aircraft. OC-ALC is responsible for depot level repairs, modifications, overhaul, and functional check flights of the E-3, KC-135, B-52 and B-1B, as well as the Navy's E-6 aircraft.

The B-1B completed a fast track modification program to better support the warfighter. OC-ALC continues to provide excellent depot level maintenance to sustain and improve the capabilities of the B-1B. Our first Block E aircraft was input to PDM in July 2001 to provide weapons flexibility to the B-1B in the future. Towed decoy is also being installed, which will greatly improve the survivability for our B-1B aircraft and crews. Several sus-

tainment inspections related to structural integrity are aimed at ensuring the flight worthiness of the B-1B well into the 21st century.

The B-2 Weapon System is the Air Force's first choice for global engagement. In response to this, the Tinker System Support Manager's main focus is to ensure the B-2 is fully operational capable to support these efforts. The major challenges facing the program are low observability maintainability, deployed operations, maintenance and supply management depot activation, and acquisition work force drawdown. Maintenance support from OC-ALC includes depot hydromechanical components, software (via contractor), and avionics.

The C/KC-135 System Program Office Directorate supports eight major commands, the National Aeronautics Space Agency (NASA), France, Turkey, and Singapore. The -135 is one of the most versatile aircraft in the United States Air Force inventory with 585 Air Force operational aircraft in 38 locations worldwide.

The B-52 Management Directorate is presently engaged in modernizing the B-52 fleet, composed of B-52H model aircraft providing the United States with a potent long-range strategic bombardment capability. Employment of the B-52 includes nuclear, conventional, and maritime taskings. Integration of cruise missiles on the B-52 enhances its effectiveness and flexibility in support of the Single Integrated Operational Plan (SIOP) and Air Expeditionary Force taskings.



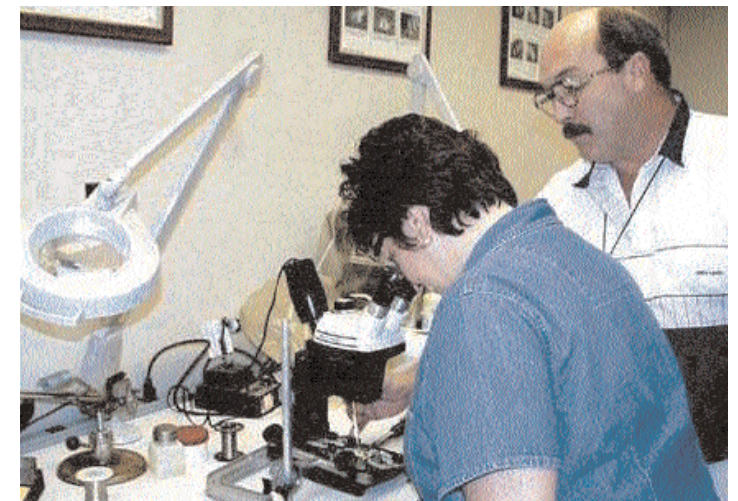
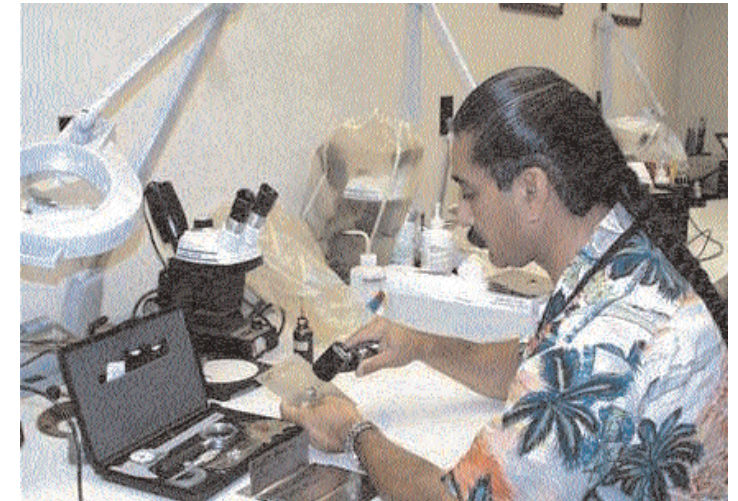
# TECHNOLOGY

OC-ALC's Technology and Industrial Support Directorate offers complete scientific, engineering, logistics, plant management, and industrial process laboratory services to the product directorates. Dedicated to the pursuit of quality products and processes, the directorate's engineers, scientists, and technicians work in both lab and field settings to ensure rapid solutions to complex problems.

OC-ALC provides support to other DOD installations and government agencies in areas such as the Oklahoma State Bureau of Investigation, Federal Bureau of Investigation, and Federal Aviation Administration. The laboratories are capable of in-depth chemical, metallurgical, and precision dimension analysis, including first article testing and conformance verification. Recognizing that technology is the cornerstone of the Air Force warfighting capability, OC-ALC has designated Technology Thrust Areas (TTAs) that partners with academia and industry to identify, implement, and sustain new technology into the future.

The TTAs focus on maintaining a balance among performance, sustainability, and affordability to improve processes and products enabling the center to perform its mission.

Through the directorate's Technology Transfer Program, Air Force technology is extended outside the center to support state colleges, universities, and the private sector through cooperative research and development agreements.





# SOFTWARE

The OC-ALC software team is broad based in mission critical software knowledge, experience, and application. This team serves the Air Force and our national defense in the areas of acquisition support, development, and maintenance. Weapons systems supported include the B-1B, B-2, E-3, B-52, C-5, C-141, C/KC-135, air launched missiles, and several jet engines.

The engine accessories test software function was named the 1996 State of Oklahoma winner of Vice President Gore's Hammer Award. The talented engineers of this function developed a new technology automated test system and test software for the F110-129 digital engine control. Providing the customer with a total test solution was a first in the Software Division's 20-year history. This system is estimated to save the Air Force over \$4M.

In 1995, the B-2 test software function assisted with the preparation of the strategy for developing the B-2 avionics depot repair capability. The strategy projected savings to the Air Force of over \$85M by involving multiple test software vendors, centralized in an Air Force-operated software integration facility.

Construction of facilities to house the B-2's key engineering software development, maintenance and fully integrated test laboratories for the B-2 stealth bomber was completed December 2001. During the first year of initial operating capability, the software development team achieved the certification of the GPS-guided joint direct attack munitions used during the air campaign over Yugoslavia. The team also tested and certified the first post-production planned avionics software improvements and maintenance enhancements, and integration of the joint stand-off weapon.

The team planned full operating capability is scheduled for June 2002 when all the laboratories will be upgraded and consolidated into three sys-

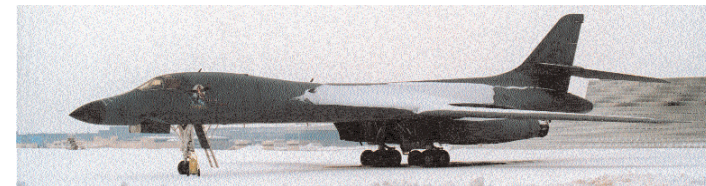
tem integration laboratories. The will be a teaming arrangement of the Air Force, specifically between the B-2 SPO and Northrop Grumman Corporation to maintain and upgrade B-2 software over the life of the B-2 program.

The E-3 software function supports sensor and diagnostic software for USAF, NATO, United Kingdom, and the French Republic. The foreign military sales agreements represent an annual software workload of approximately \$5M.

In addition, OC-ALC's software team was the first organization in federal service to achieve the Level 4 rating of the Software Engineering Institute Capability Maturity Model, and they have maintained ISO 9001 certification since November 1998; their quality systems meet international standards. Beyond these credentials, the software organization was selected in worldwide competition in May 1999 for the very prestigious Institute of Electrical and Electronics Engineers Award for Software Process Achievement.



# WEAPON SYSTEMS



B-1B Lancer

OC-ALC received the first B-1B input in FY88 with Programmed Depot Maintenance beginning FY89. In FY01, OC-ALC output 17 aircraft averaging 24,055 man-hours.



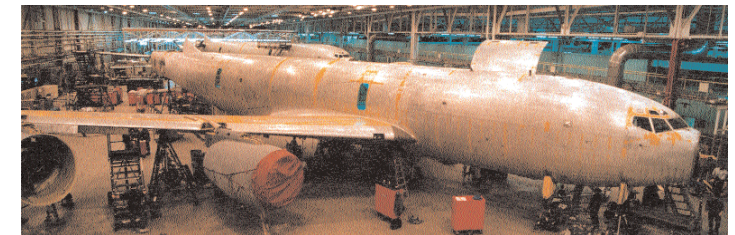
E-3 Sentry

OC-ALC began depot level maintenance and modification in 1981. ALC output five PDM aircraft for 50,855 man-hours and three speed line aircraft for 2,732 man-hours. Tinker is home of the E-3 Technical Coordination Program supporting the worldwide AWACS fleet. International partners include NATO, the Kingdom of Saudi Arabia, the French Republic, and the United Kingdom. Tinker AFB has also provided provisioning support for the Japanese 767 AWACS Program.



B-52

OC-ALC began depot maintenance on the B-52H in FY91 and worked 23 B-52 aircraft during FY01, for 30,376 man-hours.



C/KC-135

OC-ALC Systems Program Directors for the C/KC-135 manage 585 Air Force operational aircraft in 38 locations worldwide. The missions include aerial refueling, airlift, airborne command post, strategic reconnaissance, and special test. FY01 PDM production was 103 C/KC-135s (41 at OC-ALC, 37 at PEMCO, 24 at Boeing—San Antonio) with 35,157 average man-hours.

E-6 Mercury

OC-ALC performed Enhanced Phase Maintenance Program support on 30 aircraft in FY01, averaging 12,670 man-hours.

B-2 Spirit

OC-ALC is home of the B-2 System Support Management Team. The team provides operational support to the 509th Bomb Wing at Whiteman AFB MO.



Air Force One

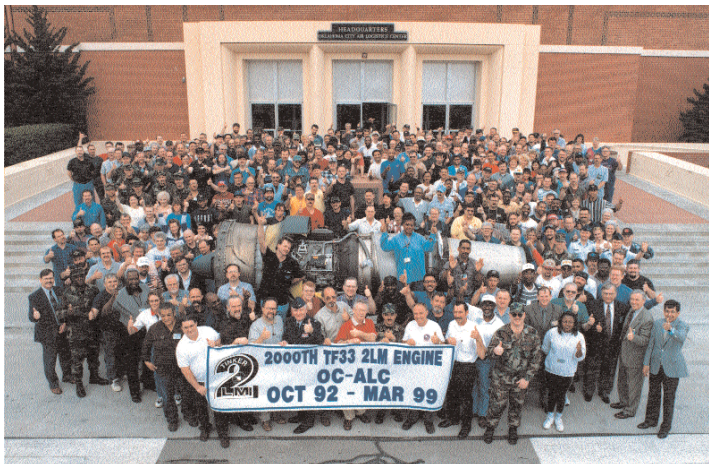
OC-ALC is the USAF center of excellence for Contractor Logistics Support for 417 commercial derivative aircraft of 40 mission-design series, including airlift, tanker, executive transport, telemetry, training, airborne command and control, and US Presidential aircraft. The center is the designated engineering authority of assigned aircraft.



# PROPULSION



Engine Maintenance in Building 3001.



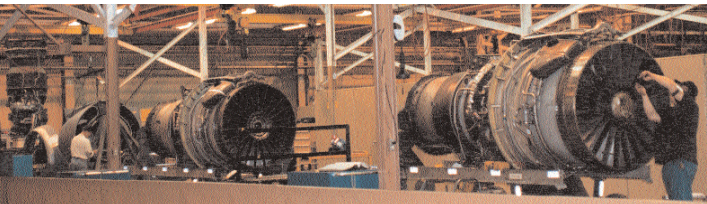
Propulsion Management Directorate members produced the 2000th engine of the TF33 series since working under the Two Level Maintenance approach to doing business.

OC-ALC is the worldwide propulsion manager for a \$31.2B inventory accounting for 19,004 active engines used by ten commands, 13 systems program directors, and 92 Air Force bases, as well as 46 foreign military sales nations. The Propulsion Management Directorate's 3,138 employees managed, overhauled, and repaired 2,144 scheduled jet engines during FY01, 95.5 percent of target.

Other significant factors contributing to Propulsion's success for FY01 included General Electric rotors exceeding production forecasts for six months, F100 modules exceeding production forecasts for nine months, and F100 management of items subject to repair exceeding production forecasts for six months.

OC-ALC's interservicing initiatives are further enhanced by collocating Air Force and Navy engine management and technical functions at Tinker. Improved information exchange and consolidation of best practices have resulted in increased warfighting capabilities and reduced costs for both services.

As the "Engine Capital of the World," OC-ALC will begin supporting the F119 engine powering the Air Force's newest state-of-the-art fighter aircraft -- the F-22 Raptor -- in 2004.



Propulsion Directorate Worldwide Engine Management									
F100	F101	F108	F110	F118	TF30				
TF33	TF34	TF39	TF41	T400	T700				
J33	J57	J69	J75	J79	J85				
T56	T58	T64	F107	F112					
Various Missile Engines									

# ACCESSORIES

OC-ALC's Airborne Accessories Directorate supports every aircraft weapon system at Tinker by overhaul and repair of engines components, avionics, and airframe accessories. It is the sole Air Force depot repair source for constant speed drives, oxygen equipment, bearing, environmental controls, and air-driven accessories. The center performs wholesale item management and logistics support for an array of logistical functions including acquisition, distribution, repair, overhaul, manufacturing, disposal, engineering, and technical and resource support. The component management area encompasses some 24,843 items

valued at \$3.79B, which supports the Air Force fleet. These accessories include hydraulics, pneumatics, flight and engine instruments, inertia navigation systems, and automated flight control systems. More than 2,200 people in the Airborne Accessories Directorate repair, overhaul, and manufacture 171,477 items yearly. The center repairs and returns to operation approximately 575,000 aircraft and jet engine components. Virtually all of the aircraft in the USAF inventory and those from 65 foreign countries carry OC-ALC components.



Karen Robert, a pneudraulics systems mechanic, discusses work on a B-52 float valve with Diane Cothran, Fuel Accessories section chief.



Sheet metal workers Melinda Guffer, left, and Debbie Moon work a -135 flap in the Sheet-Metal Back Shop of the Airborne Accessories Production Division Sub-unit Three located in Bldg. 2101



Machinist David Gatlin checks dimensions on an F-15 valve body he's grinding in the Grinding Sub-unit in Bldg. 3001. Gatlin is one of many employees of the Airborne Accessories Production Division spread throughout approximately 13 buildings on Tinker.



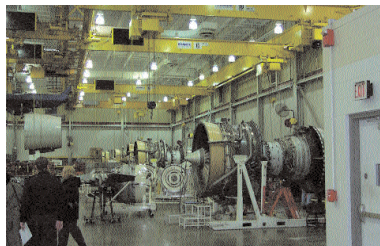
# Concept for the Future

The road ahead for the Oklahoma City Air Logistics Center and Tinker Air Force Base is challenging. To ensure growth and viability throughout the next decade and beyond depends on developing new concepts to resolve infrastructure constraints and work force issues. Right-sizing the infrastructure, molding objectives, supporting warfighters' needs, and remaining competitive in the corporate arena are all part of that challenge.

Shifting and ever-increasing workloads can create production challenges. To support Tinker and solve these challenges, the city, county, and state of Oklahoma, and the private sector are developing a business case for an innovative maintenance repair and overhaul technology center (MROTC). Even though the Air Force would not be involved in the initial MROTC development, we could become a future customer. One possible

site for this facility is across Douglas Boulevard from Tinker. This facility would be a private commercial development with future possibilities for joint tenancy of both the military and commercial aerospace repair industry -- a world class, state-of-the-art design in accordance with world class standards and philosophies.

The MROTC could provide large aircraft bays with self-sustaining shop support on land owned by the city, county, and state of Oklahoma. A tow way and taxiway across Douglas Boulevard to the new facilities could be built. These facilities could be used for the KC-135 workload being performed in Building 3001 and other facilities on base. The space vacated by movement of the aircraft workload could be used to increase engine and commodity workload capability and efficiency and provide for future partnering initiatives with private industry. MILCON funds would then provide for shop renovation to enable the increase in engine and commodity workloads.



# INDUSTRY TEAMING

OC-ALC is entering a new era of industry and educational partnerships. University faculty and students as well as private industry experts are teaming with OC-ALC scientists and engineers. The exchange of knowledge, skills, and ideas between the public and private sectors will

enhance the relevant areas of science and engineering in aerospace manufacturing, computer, and environmental sciences. Teaming to share the competitive edge reaps benefits for all in the global market place.



Area educators from more than 30 colleges, universities, and technology centers join Tinker Air Force Base efforts to replenish the work force for the future.



The Small Business Office manages several small business programs for the Oklahoma City Air Logistics Center. Its work is to enhance acquisition opportunities for small businesses in support of the Air Force mission.



# CENTERS OF INDUSTRIAL

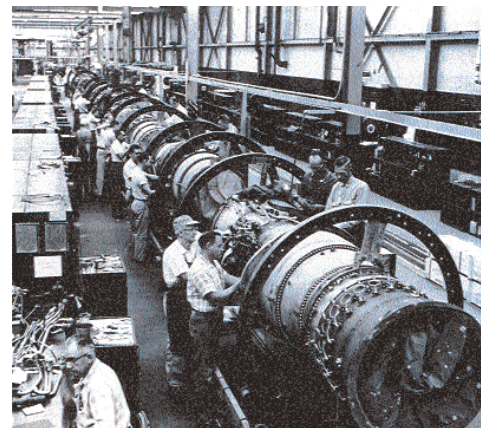
Tinker began its long history in 1940 as the dream of several Oklahoma City businessmen learned the War Department was considering the central United States as a location for a maintenance and supply depot. On April 8, 1941, the order was officially signed awarding the depot to Oklahoma City. Construction began on a mere 1,500 acres, at an initial cost of \$14M. Tinker Air Force Base is named in honor of Major General Clarence L. Tinker of Pawhuska, Oklahoma. General Tinker lost his life while leading a flight of LB-30 "Liberators" on a long-range strike against Japanese forces on Wake Island in the early months of World War II.

During World War II, the Douglas Aircraft Manufacturing Plant turned out thousands of C-47 and C-54 cargo aircraft and A-26 attack bombers while the Tinker industrial plant repaired B-24 and B-17 bombers and fitted B-29s for combat. Throughout the Korean conflict, Tinker continued its output—keeping planes flying and funneling supplies to the Far East. The base also played an important role in the Berlin and Cuban crises. During the Vietnam War, Tinker provided logistics and communications support to the Air Force units in Southeast Asia. Tinker and the Oklahoma City Air

Logistics Center (OC-ALC) began the decade of the 90s providing frontline support to the forces engaged in OPERATIONS DESERT SHIELD/STORM.

Tinker's largest organization is the Oklahoma City Air Logistics Center, one of three depot repair centers in the Air Force Materiel Command.

After the arrival of the Navy in 1992, Tinker became one of the Department of Defense's premier interservicing facilities. The Navy's TACAMO, "Take Charge and Move Out," mission provides communications links between the nation's military decision-makers and the country's arsenal of strategic weapons and adds another dimension to Tinker's strategic importance. Hosting several DOD agencies and flying operations of both Air Force and Navy units, Tinker is a shining example of the merger of operational and industrial defense missions. Together they form a unique and integrated partnership moving toward new horizons.



# and TECHNICAL EXCELLENCE

Not only is total support of America's defense system a priority, but also protecting and enhancing the environment is a top concern. Through the use of aggressive and innovative technologies, Tinker has become a national leader in pollution prevention. Entrusted with the pledge to protect and restore the environment while maintaining the Air Force mission, Tinker's environmental goals embrace a steadfast commitment to also ensure the safety of base workers, residents, and surrounding communities. The commitment to pollution prevention, environmental restoration, and environmental compliance is unwavering. At Tinker, the national defense mission and environmental stewardship go hand-in-hand.

The base is comparable to a city with a population of 35,000, which includes Air Force and Navy active duty personnel, civilian employees, and military retirees. The 72nd Air Base Wing supports the entire installation providing several critical base functions such as security, fire protection, medical services, civilian engineering, communications, supply, motor pool, and air field operations. The base also offers a variety of recreational and leisure activities including the

swimming pool, fitness centers, and a bowling alley.

The bonds that bind Tinker Air Force Base and the community at large have never been stronger than they are today. Continuing to build on ties that began some 60 years ago, base personnel are a vital and active presence in their communities throughout the area. Reaching out to the community, over 100 Tinker volunteers are participating in an Education Partnership Agreement providing math tutors at local schools.

Tinker's work force is the heart and soul of our many contributions to the defense and security of our nation. Across the command, we are working the partnerships with education and industry that will help maintain the world-class work force needed for the 21st century.

A unique combination of work force, work place, and work tools makes Tinker Air Force Base and the Oklahoma City Air Logistics Center a true "NATIONAL TREASURE."

